

Appendix VII: Management Measures

Coastal Nonpoint Program

Coastal Nonpoint Guidance Management Measures

Management measures are defined as “economically achievable measures to control the addition of pollutants to our coastal water, which reflect the greatest degree of pollutant reduction achievable through the application of the best available nonpoint pollution control practices, technologies, processes, siting criteria, operating methods, or other alternatives.”

Siting and Design

Marina Flushing

- Site and design marinas such that tides and/or currents will aid in the flushing of the site or renew its water regularly.

Water Quality Assessment

- Assess water quality as part of marina siting and design.

Habitat Assessment

- Site and design marinas to protect against adverse effects on shellfish resources, wetlands, submerged aquatic vegetation, or other important riparian and aquatic habitat areas as designated by local, state, or federal governments.

Shoreline Stabilization

- Where shoreline erosion is a nonpoint source pollution problem, shorelines should be stabilized. Vegetative methods are strongly preferred unless structural methods are the more cost effective, considering the severity of wave and wind erosion, offshore bathymetry, and the potential adverse impact on other shorelines and offshore areas.

Stormwater Runoff

- Implement effective runoff control strategies that include the use of pollution prevention activities and the proper design of hull maintenance areas.
- Reduce total suspended solids (TSS) in runoff from hull maintenance areas by 80 percent. For the purposes of this measure, an 80 percent reduction of TSS is to be determined on an average annual basis.

Fueling Station Design

- Design fueling stations to allow for ease in cleanup of spills.

Sewage Facility

- Install pumpout, dump station, and restroom facilities where needed at new and expanding marinas to reduce the release of sewage to surface waters. Design these facilities to allow for ease of access and post signage to promote use by the boating public.

Marina and Boat Operation and Maintenance

Solid Waste

- Properly dispose of solid wastes produced by the operation, cleaning, maintenance, and repair of boats to limit entry of solid wastes to surface waters.

Fish Waste

- Promote sound fish waste management through a combination of fish cleaning restrictions, public education, and proper disposal of fish waste.

Liquid Waste

- Provide and maintain appropriate storage, transfer, containment, documentation, and disposal facilities for liquid material, such as oil, harmful solvents, antifreeze, and paints, and encourage recycling of these materials.

Petroleum Control

- Reduce the amount of fuel and oil from boat bilges and fuel tank air vents entering marina and surface waters.

Boat Cleaning

- For boats that are in the water, perform cleaning operations to minimize, to the extent possible, the release to surface waters of (a) harmful cleaners and solvents and (b) paint from in-water cleaning.

Public Education

- Public education/outreach/training programs should be instituted for boater, as well as marina owners and operators, to prevent improper disposal of polluting material.

Maintenance of Sewage Facilities

- Ensure that sewage pumpout facilities are maintained in operational condition, locally situated for convenience, and encourage their use.

Boat Operation

- Restrict boating activities where necessary to decrease turbidity and physical destruction of shallow-water habitat.